

Appendix A

Claim Amendments

1. (Currently amended) ~~Method~~ A method of treatment or prophylaxis of diseases associated with or based on impairment or dysfunction of cerebral vascular reactivity in a patient afflicted with such disease comprising the step of administering a pharmacologically tolerable and therapeutically effective amount of a PDE5 inhibitor to the patient in need thereof.
  
2. (Currently amended) ~~Method~~ The method of treatment according to claim 1 wherein the disease is associated with pre-senile dementia.
  
3. (Currently amended) ~~Method~~ The method of treatment according to claim 1 ~~[[or 2]]~~, wherein the disease is selected from the group consisting of vascular-dementia, ~~and/or~~ neuronal dementia, diabetes associated impairments of neurovascular-coupling, impairments of cerebral vascular function secondary to systemic arterial hypertension, ~~and/or~~ impairments of

cerebral        vascular        function        secondary        to  
arteriosclerosis,    Alzheimer's    disease,    Parkinson  
disease and Huntington's disease.

4. (Currently amended) ~~Method~~ The method of treatment according to claim 1, wherein the disease is associated with or based on post-ischemic disturbances of cerebral function.
5. (Currently amended) ~~Method~~ The method according to claim 1 [[or 4]], wherein the disease is based on cerebral insults, stenosis of extra- or intra-cerebral arteries or cerebral bleeding.
6. (Currently amended) ~~Method~~ The method according to claim 1, wherein the disease ~~diseases~~ is associated with impairments of cognitive function associated microcirculatory disorders/dysfunction.
7. (Currently amended) ~~Method~~ The method according to claim 1 [[or 6]], wherein the disease is selected from the group consisting of septic encephalopathy, arteriosclerotic encephalopathy, diabetes associated

encephalopathy, toxic encephalopathy, multiple sclerosis, Creutzfeldt-Jakob disease, encephalopathy associated with autoimmune thyroiditis (Hashimoto's encephalitis), autoimmune thyroiditis, cerebral microangiopathy), hypercholesterolemia, hypertriglyceridemia, hypertension, pulmonary hypertension, peripheral arterial disease, chronic renal failure, chronic heart failure, sepsis, preeclampsia [[,]] and celiac disease.

8. (Currently amended) ~~Method~~ The method according to claim 1, [[6 or 7,]] wherein the disease is sepsis associated encephalopathy (SAE).
9. (Currently amended) ~~Method~~ The method according to ~~any of the preceeding claims~~ claim 1, wherein the PDE 5 inhibitor is selected from the group consisting of sildenafil, vardenafil and tadalafil.
10. (Currently amended) ~~Method~~ The method of treatment or prophylaxis of any of the diseases as indicated in claim 2 ~~any of the claims 2 to 7~~ in a patient afflicted with such disease comprising the

step of administering a pharmaceutically tolerable and therapeutically effective amount of a compound capable to improve cerebral vascular reactivity and to influence kinetic adaptation of cerebral blood flow.

11. - 20. (Canceled)